



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/550,991

07/13/2006

Spiros Fotinos

1581/141

4438

2101 7590 10/09/2009  
Sunstein Kann Murphy & Timbers LLP  
125 SUMMER STREET  
BOSTON, MA 02110-1618

EXAMINER

ARNOLD, ERNST V

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

10/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,991	<b>Applicant(s)</b> FOTINOS ET AL.	
	<b>Examiner</b> ERNST V. ARNOLD	<b>Art Unit</b> 1616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 51-62 and 118-122 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-62 and 118-122 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-50 and 63-117 have been cancelled. Claims 118-122 are new. Claims 51-62 and 118-122 are under examination. Applicant's amendment has necessitated a new ground of rejection. Accordingly, this Action is FINAL.

#### **Withdrawn rejections:**

Applicant's amendments and arguments filed 6/17/09 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below is herein withdrawn.

#### ***Claim Rejections - 35 USC § 102***

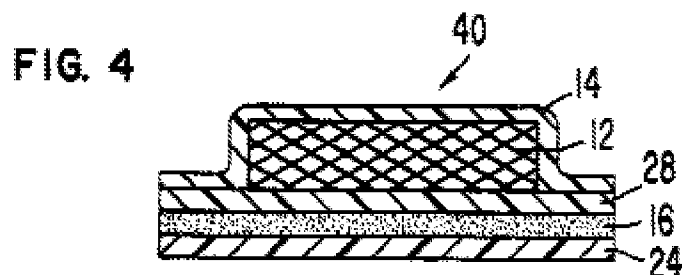
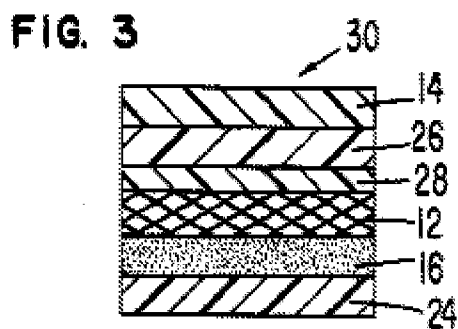
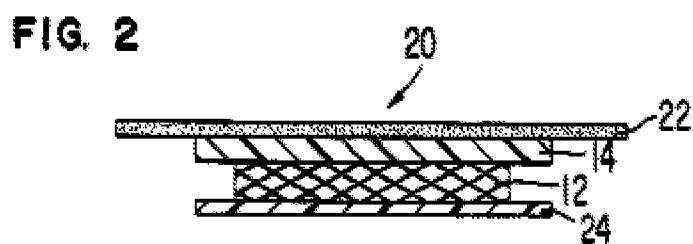
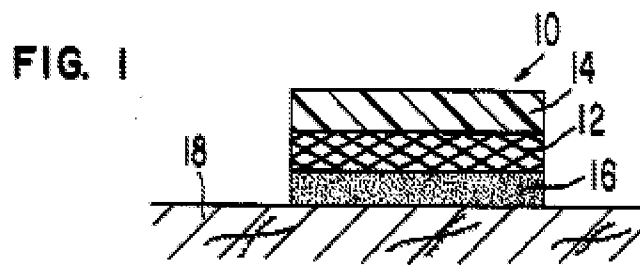
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 51, 56, 59, 60, 62, 121 and 122 remain/are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US 5411740).

Lee et al. disclose in Figures 1-4, reproduced below:



a transdermal drug delivery device comprising a reservoir with an active agent and methods of treating neurogenic bladder disorders (Abstract and claims 1-28). As is

Art Unit: 1616

clearly shown above in the Figures, for example Figure 2, device 20 contains an active ingredient reservoir 12. A backing layer 14 and adhesive overlay 22 maintain the device to the skin. A strippable release layer 24 is removed just prior to use (column 5, lines 24-49). Other materials are contemplated in the construction of the device (column 7, lines 15-33). Discs were cut of the laminate (column 9, lines 20-23).

In column 9, lines 10-23, it is disclosed that:

☞ The devices for Example 1 were prepared as follows:

**A. Formulation without a Permeation Enhancer**

A formulation containing 30 wt % oxybutynin base in a matrix of EVA 40 (U.S.I. Chemicals, Illinois) was prepared by dissolving the oxybutynin base and EVA 40 in methylene chloride. The solution was poured onto a sheet of fluorocarbon diacrylate ("FCD")/polyester release liner to dry. The dried material was pressed to 5 mil (a. 0.1 mm) thickness between two sheets of FCD/polyester release liner at 75° C. The resulting film was laminated to a flexible cloth backing (spun laced polyester, 1.3 oz/yd<sup>2</sup>), and 2.0 cm<sup>2</sup> discs were cut from the laminate.

So, in other words, a method of holding an active-agent containing composition (oxybutynin) comprising, providing a support substrate (cloth backing) with one side in contact with a pattern adhesive, it has the pattern of the cloth backing, (column 9, lines 45-59), pouring the active agent solution on the a sheet of fluorocarbon diacrylate/polyester sheet (support substrate treated with a fluorochemical) and allowing it to dry before pressing it between two sheets of release liner (since it is a release liner it is removably attached otherwise it wouldn't release); attaching the resulting film to a flexible cloth backing (support substrate) and segmenting the final support substrate into an array of discrete film segments; into discs. It is the Examiner's position that the

Art Unit: 1616

adhesive has a single pattern. So, by making the device of Lee, it inherently performs the method of holding an active agent containing composition. In this way, claims 51, 56, 62, 121 and 122 are anticipated. In the absence of evidence to the contrary, the steps are performed in a continuous process, each disc contains a uniform amount of active agent thus anticipating instant claims 59 and 60.

Lee et al. teach in column 7, lines 26-33:

The aforementioned patents describe a wide variety of materials which can be used for fabricating the various layers or components of the transdermal oxybutynin delivery devices according to this invention. This invention therefore contemplates the use of materials other than those specifically disclosed herein, including those which may hereafter become known to the art to be capable of performing the necessary functions.

The patents can be found in column 4, lines 47-54.

Lee et al. disclose in column 10, lines 7-14: The oxybutynin mix was calendared to 5 mil thickness between release liners (FCD/polyester). Five one-foot sections of the oxybutynin film were heat laminated to Medpar® backing (medium density polyethylene layer/aluminum polyester layer/EVA layer). It is the Examiner's position that 'heat laminated' reads on heat sealing of instant claim 118. Three of the oxybutynin film/backing laminates were laminated to 3M acrylate transfer adhesive MSP 1006 P reading on instant claim 119. With regard to 'intermediate support substrate' this is deemed merely semantics as to what one might call the support substrate.

### **Response to Arguments:**

Applicant asserts that the claim language requires: "segmenting the film attached to the support substrate into an array of discrete film segments attached to the support

Art Unit: 1616

substrate.” and that the reference of Lee does not disclose this limitation. Respectfully, the Examiner cannot agree. When Lee et al. cut discs out of the laminated structure and this reads on that limitation. The discs are discrete film segments attached to the support substrate. It does not matter that they are ‘disc’ in shape.

Applicant asserts that Lee does not disclose placing the film in ‘removably attached’ contact with the pattern adhesive. Respectfully, the Examiner cannot agree because such a function as being “removably attached” is inherent in the structure of Lee et al. Applicant’s claim language is so vague and unresponsive that the art of Lee is deemed to read upon the instant claims.

Applicant asserts that Lee does not disclose segmenting a layer of film attached to a support substrate into an array of discrete film segments attached to the support substrate and directed the Examiner to Figures 1 and 2. Respectfully, the Examiner cannot agree. The claim language is not so specific to limit the "invention" to what is shown in figures 1 and 2. In claim 51:

segmenting the film attached to the [[final]] support substrate into an array of discrete film segments attached to the [[final]] support substrate.

All that is required is that the film attached to the support substrate is segmented into an array of discrete film segments attached to the support substrate. The multiple discs of Lee et al. are an array of discrete film segments attached to the support substrate. In support of the Examiner’s position is Applicant’s own disclosure which clearly states on page 12, lines 10-11: “...the method further includes a step of cutting

Art Unit: 1616

the attached support substrate...". Therefore, "segmenting the film attached to the support substrate" can include cutting the attached support substrate.

Applicant asserts that the adhesives in Lee perform different functions than in the embodiments of the present invention. Respectfully, the Examiner cannot agree.

Adhesives are adhesives and perform as adhesives. What one might do with the adhesive is intrinsic to the adhesive because that is what an adhesive is meant to do and it can perform multiple functions such as adhering to a support substrate, releasable liner, and adhering to skin of a patient.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.



Art Unit: 1616

Claims 51-62 and 118-122 remain/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 5411740) in view of Cartmell et al. (US 5489262) and Robertson et al. (US 3755042).

Applicant claims a method of holding an active agent-containing composition, the method comprising: providing a support substrate, one side of the substrate in contact with a pattern of adhesive; attaching a film including the active agent-containing composition to the final support substrate to place the film in removably attached contact with the pattern of adhesive; and segmenting the film attached to the support substrate into an array of discrete film segments attached to the support substrate.

### **Determination of the scope and content of the prior art**

#### **(MPEP 2141.01)**

The reference of Lee et al. is discussed in detail above and that discussion is hereby incorporated by reference.

Cartmell et al. teach flexible wound dressing products containing a clear hydrogel material (Abstract; figures 1-6 and accompanying text; and claims 1-9). Method of manufacturing the device create the device and reads on the instant method of holding an active agent (see claims 1-9). Claim 1 recites:

➤ **What is claimed is:**  
**1. A method of manufacturing a wound dressing product for a wound, comprising the steps of:**

Art Unit: 1616

providing a transparent thin-film layer having a first side and a second side and further having a perimeter portion and a center portion;

coating said perimeter portion of said second side of said transparent layer with a first adhesive layer; 3

providing a backing layer having a first side and a second side;

coating said second side of said backing layer with a second adhesive layer; 10

providing a support layer having a first side and a second side, said support layer comprising a permeable fabric having a plurality of interstices therewithin; 15

laminating said first side of said support layer to said second side of said backing layer; 17

applying a hydrogel material to said second side of said support layer, wherein said hydrogel material penetrates said interstices to said first side of said support layer such that said hydrogel material resides on both said first side and said second side of said support layer, and whereby said backing layer, said support layer and said hydrogel material collectively form a reinforced hydrogel patch; 20

laminating said hydrogel patch to said center portion of said transparent layer, wherein said first side of said backing layer adheres to said second side of said transparent layer by means of said first adhesive layer; 21

providing a release liner having a first side and a second side; 30

providing at least one removable tab having a first side and a second side, so as to provide a grippable surface to facilitate the removal of said release liner from said transparent layer and to facilitate the handling of said wound dressing during application of said dressing to a wound; 31

laminating said first side of said tab to one edge of said perimeter portion of said second side of said transparent layer, whereby said first adhesive layer is positioned between said tab and said transparent layer; 40

laminating said first side of said release liner to said perimeter portion of said second side of said transparent layer, whereby said adhesive layer is positioned between said transparent layer and said release liner, and said tab portion is positioned between said adhesive layer and said release liner. 41

Art Unit: 1616

The release liner is preferably silicone coated (column 4, lines 35-37; column 7, lines 52-53). The patch is manufactured and cut to size (column 4, lines 27-29). Preserving the sterility of the wound dressing product is taught (column 7, lines 63-65).

Robertson et al. teach sterile packaging for medical devices with Teflon packaging (Abstract; figures 1 and 2 and text; and claims 1-4).

### **Ascertainment of the difference between the prior art and the claims**

#### **(MPEP 2141.02)**

1. The difference between the instant application and Lee et al. is that Lee et al. do not expressly teach sterilizing at least one of the array of film segments, the pattern adhesive, and the one side of the support substrate; making a pattern of parallel lines of the adhesive and enclosing the final support substrate in a container.

2. The difference between the instant application and Lee et al. is that Lee et al. do not expressly teach contacting the film removably attached to a support substrate with the pattern of adhesive, the support substrate located on a side of the film opposite the pattern of adhesive and delaminating the intermediate support substrate from the film.

3. The difference between the instant application and Lee et al. is that Lee et al. do not expressly teach a side of the initial support substrate in contact with the film is coated with silicon based compound. This deficiency is cured by the teachings of Cartmell et al.

4. The difference between the instant application and Lee et al. is that Lee et al. do not expressly teach superposing a sealing material over the array of discrete film segments attached to the final support substrate, the sealing material including a non-stick coating on at least a portion of the surface of the sealing material, wherein the non-stick coating reduces adhesion between the surface of the sealing material and at least one film segment when the sealing material contacts the at least one film segment. This deficiency is cured by the teachings of Robertson et al.

### **Finding of prima facie obviousness**

#### **Rational and Motivation (MPEP 2142-2143)**

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to sterilizing the device; making a pattern of parallel lines of the adhesive and enclosing the final support substrate in a container and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because it is common sense to provide a sterile device that will come into contact with human skin such that infection is not caused by the device and Cartmell et al. teach preserving the sterility of the product; absent unexpected results the adhesive will function as an adhesive whether it covers the entire surface, is placed in parallel lines or is in a polka dot arrangement; finally, placing the device in a container for commercial sale is the

Art Unit: 1616

penultimate step in the marketing of the device which would be known and obvious to one of ordinary skill in the art.

2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to contacting the film removably attached to an initial support substrate with the pattern of adhesive, the initial support substrate located on a side of the film opposite the pattern of adhesive and delaminating the initial support substrate from the film and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results (*In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (); *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930)). The end result remains the same; a transdermal patch is made.

3. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make the device of Lee et al. with a side of the initial support substrate in contact with the film is coated with silicon based compound, as taught by Cartmell et al., and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Lee et al. teach using any materials known (see above) and Cartmell et al. provide the silicone release liner. The expected result remains the same. A transdermal patch is made.

4. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to superposing a sealing material over the array of discrete

Art Unit: 1616

film segments attached to the final support substrate, the sealing material including a non-stick coating on at least a portion of the surface of the sealing material, wherein the non-stick coating reduces adhesion between the surface of the sealing material and at least one film segment when the sealing material contacts the at least one film segment in the device of Lee et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because the patch needs a packaging material for sale to the public and Robertson et al. provide a non-stick packaging material that can be sterilized that can hold the patch(es) of Lee et al. Placing the patch(es) of Lee et al. in the package of Robertson et al. intrinsically meets the limitations of instant claim 61.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**Response to arguments:**

Applicant's arguments are essentially the same as above with respect to the reference of Lee and that the secondary references do not cure those deficiencies.

Art Unit: 1616

Respectfully, the Examiner cannot agree and the Examiner's response is detailed *supra*.

### ***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (7:15 am-4:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernst V Arnold/  
Primary Examiner, Art Unit 1616